Basic Facts About Turfgrasses:

- Cool-season turfgrasses adapted to Connecticut climatic conditions have a built-in drought response mechanism called dormancy. The grass will shut down growth when moisture is limited to conserve water and recover with the return of moisture.
- Dormancy is characterized by the development of brown turfgrass. The turfgrass is not dead but in a condition which preserves the vital parts of the plant. Turfgrass dormancy reduces water usage and can concentrate the limited amount of available moisture into the crown, rhizomes and roots.
- During dormancy, a light watering or rainfall of 0.5 inch every two weeks will help minimize damage to the lawn during the dormancy period. This watering practice will supply enough moisture to keep crowns, rhizomes and roots hydrated and alive.
- In general, turfgrasses can be expected to survive in a dormant condition for up to four to five weeks with limited damage if temperatures are at or below normal. If daytime temperatures are high (mid-80's or higher) consistently through the stress period, only three to four weeks of survival can be expected.
- Without rainfall, a lawn will normally require supplemental irrigation of approximately 1.0 inch of water per week to keep the lawn green.

When Water is Available:

- Irrigate deeply and infrequently. Heavy, infrequent waterings will penetrate deeply into the soil and encourage a deep root system.
- Light, frequent waterings predispose the grass to greater water stress because the water in this shallow depth will be used up quickly by the grass and some water will be lost through evaporation.

During Drought Conditions or Low Water Availability:

- If watering restrictions are all but certain, then it is best not to begin to irrigate at all and allow the turfgrasses to acclimate to the low water availabilities, this is called “pre-conditioning”.
- A number of research studies have shown that grasses that were pre-conditioned to water stress better withstood and recovered much more quickly from drought conditions than grasses that were abruptly cutoff from irrigation.
- Raising the height of the mower/having taller grass provides more shading of the soil, keeping temperatures cooler and reducing soil evaporation. Also, grass rooting depths are related to mower cutting height – the longer the grass, the deeper the roots; conversely, the shorter the grass, the shallower the roots. Grass with deeper roots are able to access deeper soil water. Mower height should be a minimum of 3.0 – 3.5 inches.
- When mowing the lawn never remove more than one-third of the total leaf area at any one time. A lawn mowed at a height of 3 inches should be cut when it reaches a height of 4.5 inches. Removing more than one-third of the leaf area weakens the turfgrass and reduces its capacity to withstand additional environmental stresses.
- If possible mow in the cool of the morning or evening. Mowing during high temperatures of midday places additional stress on the turf. Also make sure the mower blade is sharp. Dull blades tear and bruise the leaf tips.
- Avoid fertilizer application as nitrogen fertilizers stimulate shoot growth at the expense of the roots. Most of the commercially available lawn fertilizers are in the form of salts and applying fertilizers during a drought can worsen the situation.

Sources: *University of Connecticut* - www.ctiwr.uconn.edu/DroughtinCT.htm
University of Nebraska – www.lancaster.unl.edu/hort/factsheets/Turf301.htm